## ABSTRACT OF THE DISCLOSURE

In writing N level of multilevel data to nonvolatile semiconductor memory by repeating a verification process, a verification result of a memory cell where the Nth threshold level which is the highest level is to be written as an expected level is invalidated until completion of writing to a memory cell where the (N-1)th and lower level is to be written. The verification result of the memory cell where the Nth level is to be written is validated after reaching the (N-1)th write level. A reference current supplied to a sense amplifier corresponding to the Nth level is set at at least a level allowing no indeterminate sensing of a sense amplifier. In verification of the Nth level data, a word line voltage supplied for verify- reading is raised from V<sub>W</sub> 1 to V<sub>W</sub> 2.